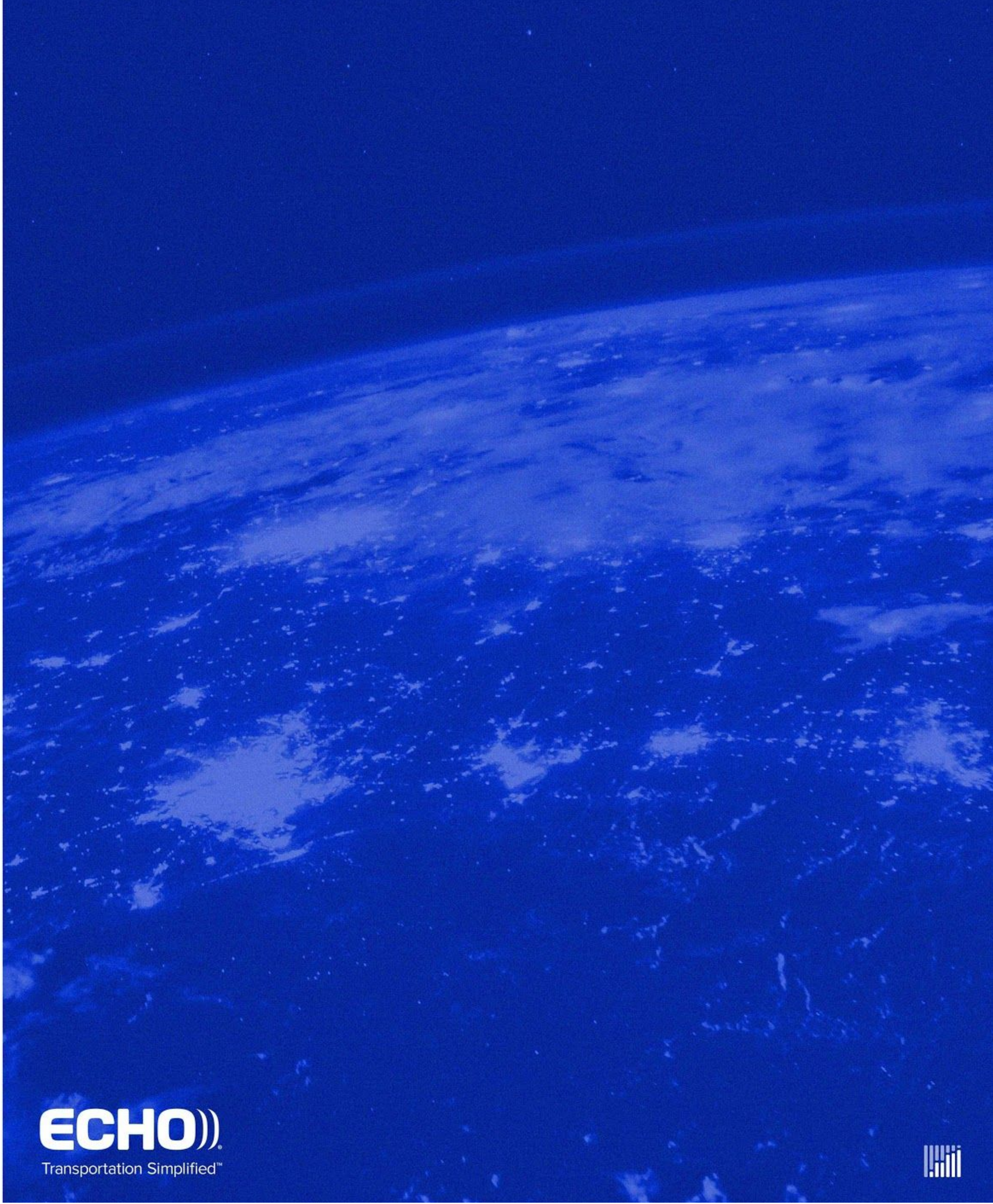
INDUSTRIAL FREIGHT REVIEW 2020

SEPTEMBER2020



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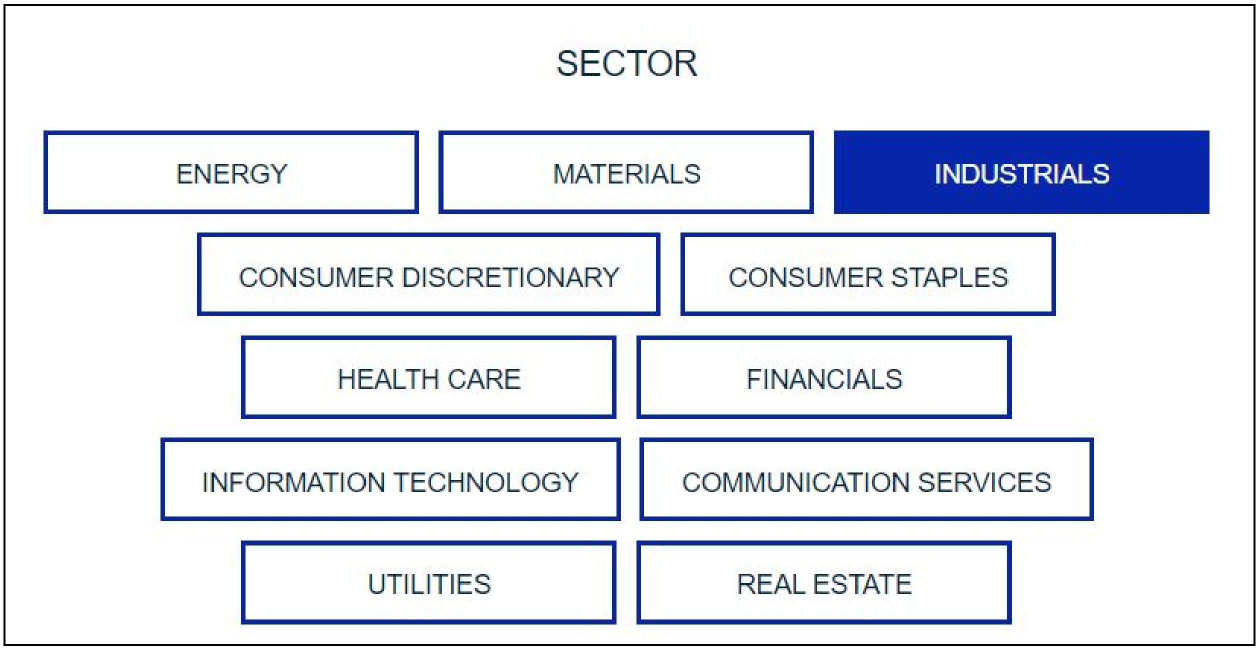
What is an industrial company?

It is important to start with the basics of what actually constitutes an industrial company and industrial freight because it often means different things to different people.

There are 11 Global Industry Classification Standard (GICS) sectors of the U.S. economy as defined by MSCI Inc. and Standard & Poor's — the producers of the definitive categorization system for industry groups in the U.S. The industrials sector is further subdivided into three distinct industry groups: transportation, capital goods, and commercial and professional services. Then, within those three industry groups, there are a total of 13 sub-industries (as shown in Figure 3 below).

Figure 1: The 11 GICS sectors of the U.S. economy

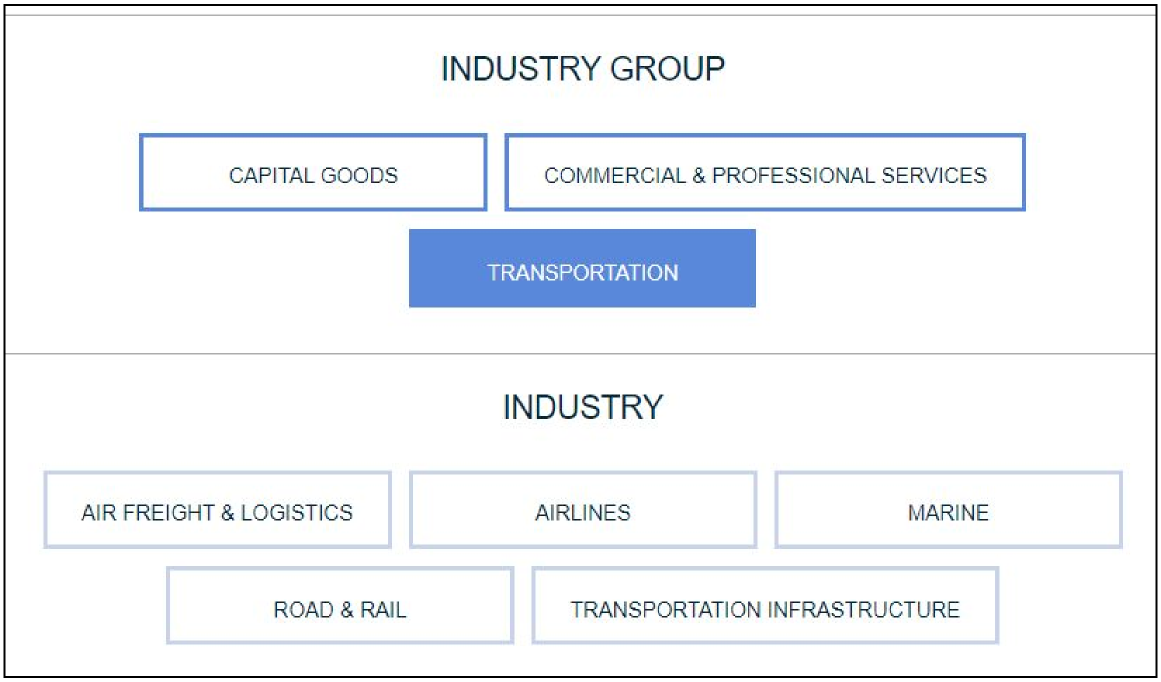


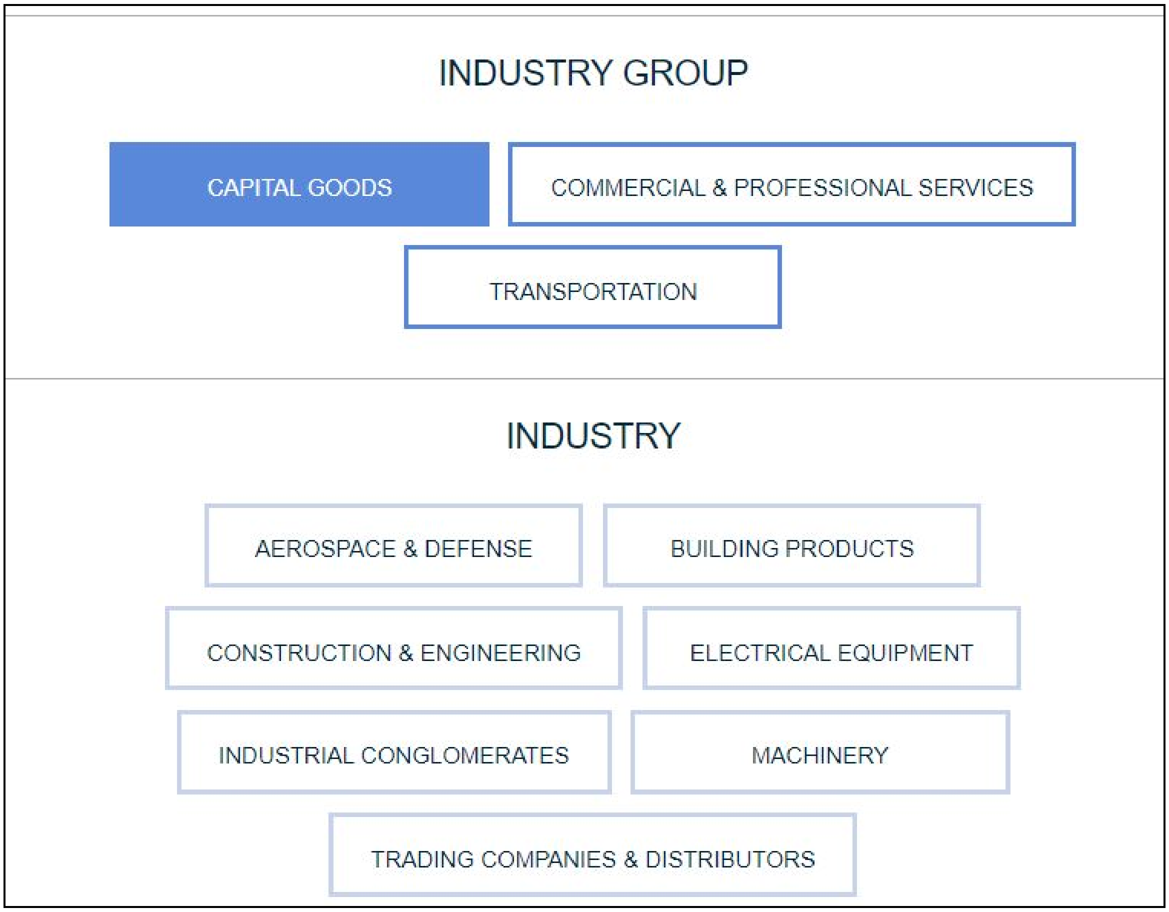
[Source: MSCI.com]

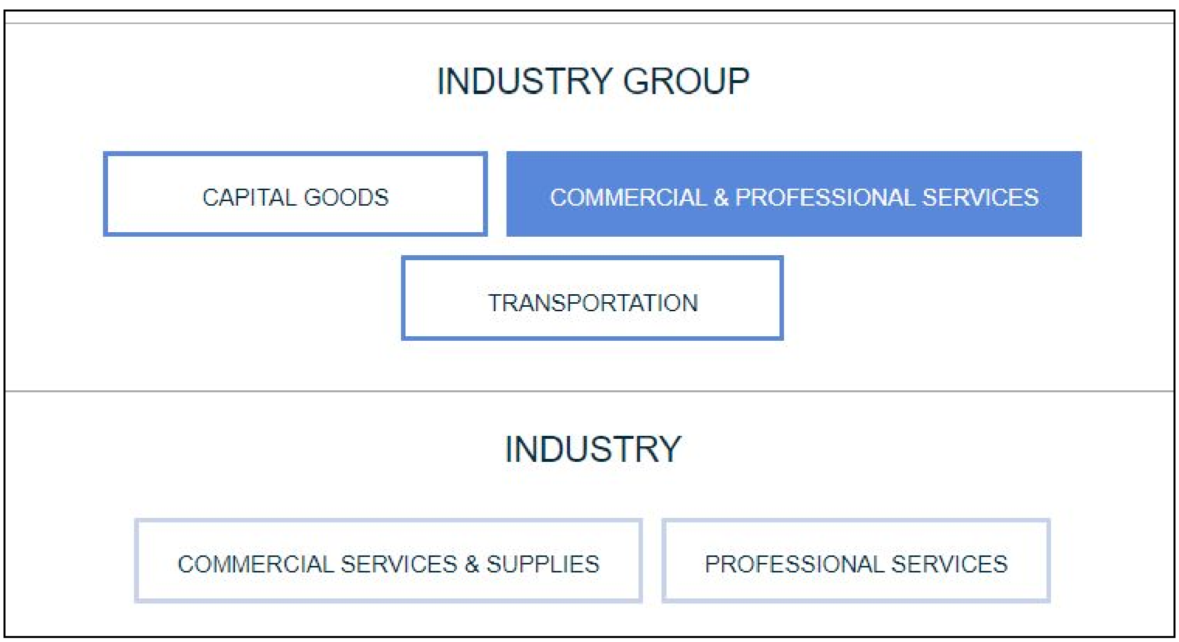
Figure 2: The four-tiered, hierarchical GICS classification system

[Source: MSCI.com]

Figure 3: Industry groups and industries within the Industrials GICS Market Sector







Source: MSCI.com

In the context of industrial transportation, we will focus on capital goods and transportation infrastructure (e.g., OEMs and transportation equipment companies within the transportation industry group) because those are the industry groups and sub-industries that will be responsible for industrial freight. For the purposes of this white paper, we will exclude commercial and professional services, which are mostly services companies involved in areas such as education, recruiting and staffing that do not move much freight.

At its most basic level, industrial freight is essentially any freight tangentially associated with manufacturing and construction (and the requisite inputs and outputs involved). Thus, when one refers to industrial freight, it means products such as lumber, automotive parts and finished vehicles, steel, heavy equipment, construction materials, etc.

There is another important point worth stating when it comes to the industrials sector. Industrials are very cyclical in nature, and demand for industrial-related products tends to rise and fall with the U.S. business cycle. As Investopedia notes, "performance in the industrial goods sector is largely driven by supply and demand for building construction in the residential, commercial and industrial real estate segments, as well as the demand for manufactured products."

The reason for the inherent cyclicality of the industrials sector is that, when the economy contracts (such as in the current COVID-19-driven, deep U.S. recession), business activity for industrial companies declines as their customers postpone expansion, cut capital expenditures (which is revenue for an industrial company) and produce fewer goods.

Is an industrial recovery underway in the United States?

There are several key performance indicators (KPIs) that one can look at to measure the health and performance of the industrial economy. These include industrial production, home sales, home building (i.e., new home starts), construction spending and manufacturing demand. Within each of these categories are several prominent macroeconomic indexes and figures that are publicly available and released on a regular schedule by major government agencies and industry trade associations.

Perhaps the most important indicator of the health of the overall U.S. industrial economy is the Institute of Supply Management's (ISM) Purchasing Managers Index (PMI). According to an ISM survey, the U.S. industrial economy dropped into a severe recession in April, as signaled by an ISM index score of about 40 (which is deep in contraction territory). However, this index has since experienced a V-shaped rebound back into expansion territory as of the most recent reading. The ISM Index reached 56 in August, up 1.8 points from July and the fourth straight month of expansion following the plunge in April. As a result, the U.S. industrial economy appears to be in the early stages of a recovery, which bodes well for current and future freight flows in the industrial sector.

Figure 4: ISM PMI (2016-2020)

[**SONAR: ISM.PMI**]

Another very closely watched indicator that measures the health of the U.S. industrial economy is the Federal Reserve's monthly release of the "Industrial Production and Capacity Utilization" report. The latest report, from July, reveals an industrial recovery is at hand. The July reading rose 3% month-over-month (after increasing 5.8% in June) but is still 8.4% below its pre-pandemic February level. Capacity utilization came in at 70.6% in July, well above the April lows of 64.2%, but still down meaningfully compared to 77.4% in July 2019. Therefore, the overall message here is that an industrial recovery is underway but is still a ways off from returning to the prior pre-pandemic peak.

In terms of home sales and new home starts, the National Retailers Association releases several monthly reports that all reveal a booming housing market in the U.S. Housing strength is being driven by numerous factors. First, all-time low interest rates are making financing affordable for both new homebuyers and refinancers. Second, American consumers are spending lots of money on their homes, home-related projects and home decor since many are working from home for the foreseeable future. Third, 72 million American Millennials have entered the prime of their homebuying years. Lastly, there is a major exodus out of mega metropolitan areas to the suburbs.

Adding fuel to the fire is the fact that there is a major undersupply of housing (and particularly starter homes) in the U.S., which has driven housing prices up 9% year-to-date, according to Redfin. This is a positive development for consumer spending and the net worth of U.S. consumers as housing is usually most Americans' primary asset. Even with rapidly rising housing prices, affordability is not yet out of reach due to rock-bottom interest rates. As a result of the robust housing backdrop, as well as all housing-related inputs (such as lumber) and durable finished goods (e.g., from home improvement and furniture stores), this sector of industrial transportation is on fire and any carrier or broker with exposure to this segment is likely having a great year.

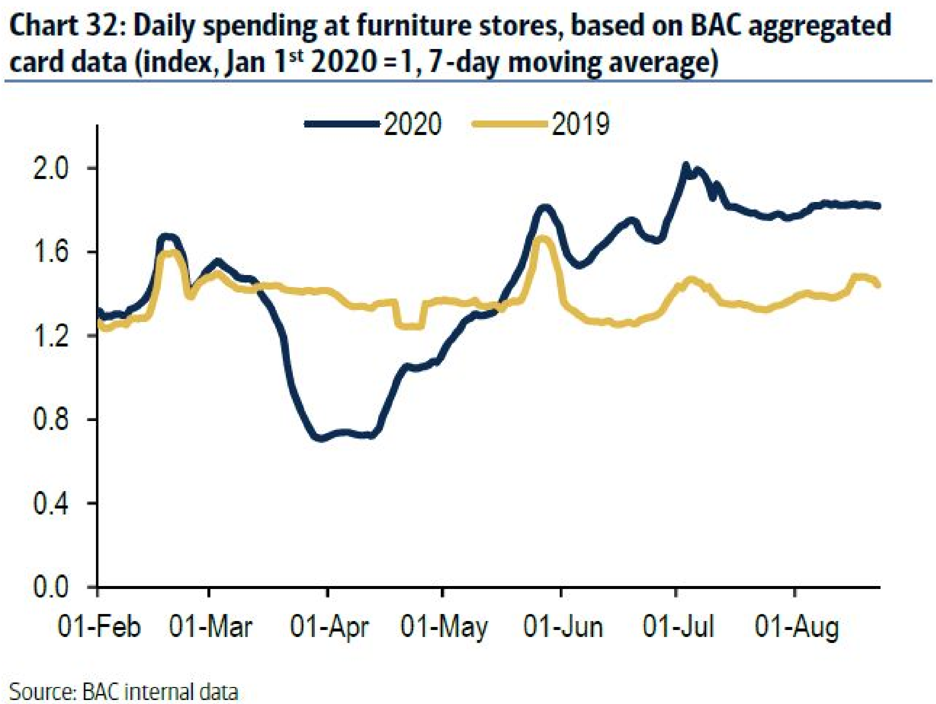
Figure 5: Home improvement spending in 2020 is running well above 2019 levels (currently 29% higher year-over-year for the latest seven days)

Chart 33: Daily spending at home improvement stores, based on BAC aggregated card data (index, Jan 1st 2020 =1, 7-day moving average)

Source: BAC internal data

Source: BofA Global Research

Figure 6: After an initial steep drop early on in the pandemic, furniture spending in 2020 is running well above 2019 levels (currently 27% higher year-over-year for the latest seven days)



Source: BofA Global Research

There are many other indicators that support the accelerating momentum of an industrial recovery in the U.S., too many to list them all here. Instead, we will conclude with the latest reading of the Logistics Managers Index (LMI) from July, which again confirms an industrial recovery is underway. The most recent LMI reveals that transportation capacity is at a 22-month low while utilization and pricing have reached 19-month highs.

Figure 7: Logistics Managers Index (LMI; 2017-2020)

SONAR: LMI.TOTL

"At Echo, we simplify transportation management for over 35,000 clients across a wide range of industries, including the industrial and manufacturing sectors. After the initial downturn at the onset of the COVID-19 pandemic, we've seen a surge of shipments across certain sectors, including industrials, as states reopened. To keep up with the sudden increase in demand, it's critical that companies in thriving sectors adjust their transportation strategies. At Echo, we're committed to helping our clients navigate the rapidly changing freight market by leveraging our industry-leading technology, expert logistics professionals, and vast access to capacity to provide our clients with the solutions that best fit their unique needs. With our offering of transportation solutions across all major modes, including truckload, partial truckload, LTL, intermodal, and expedited, we ensure over 16,000 loads per day are transported quickly, securely, and cost-effectively."

— Dave Menzel, President and Chief Operating Officer, Echo Global Logistics

Lumber prices are signaling a robust backdrop for construction and housing in the U.S.

Lumber is an important commodity in terms of industrial freight movements as it represents a primary input for nearly all construction projects and for a meaningful amount of manufacturing. Lumber prices have risen nearly threefold year-to-date in 2020. Lumber demand has soared over the past several months on the back of a strengthening U.S. economy and housing market and a lack of supply (including some contribution from capacity coming offline in late 2019). The lack of supply boils down to mainly two factors: wildfires in California and economic uncertainty due to COVID-19, since both of these factors have caused shutdowns in lumber mills.

To exacerbate the supply shortage, new housing starts have soared approximately 60% since the lows in April. With a rally in new home starts and a recovery in the general economy, it is unlikely that demand will wane in the short- to intermediate-term for lumber and forest products.

One caveat is that lumber prices, should they continue to rise unabated, could pose a risk in terms of denting demand for new home starts and home renovation projects.

Figure 8: Lumber prices nearly triple since spring due to U.S. housing demand

Source: Stockcharts.com

Railcar data is improving and bodes well for future industrial-related freight volumes

Another important way to assess the health of the industrial freight economy (and the broader U.S. economy) is with rail carload volumes. Here again, signs of improvement are evident.

Rail carloads typically transport the building materials for mass-produced goods. The finished products are then usually transported on trucks and rail containers. It is important to note that carloads are not intermodal containers or boxes that typically transport finished goods, which are reported separately on a weekly basis by the Association of American Railroads (AAR). Carloads are generally filled with bulk, non-palletized items, loosely loaded in either a liquid tank or open-top hopper or gondola for ease of loading and unloading at production facilities. Chemicals shipped on the rails are processed into everything from household cleaners to petroleum-based plastics.

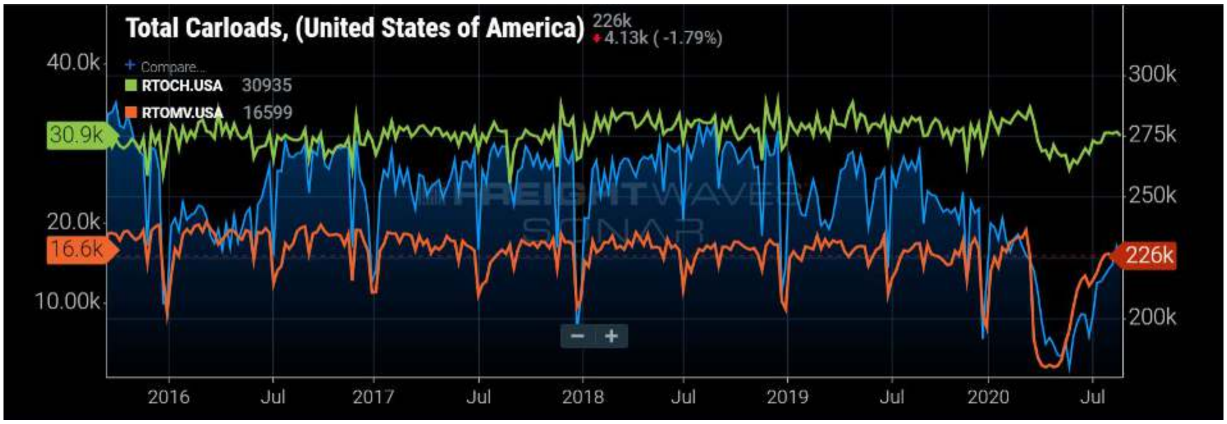
Total carload volumes are a barometer of the industrial sector of the economy. Total carload volumes include chemicals and motor vehicle parts, but also items like coal, grains and petroleum products.

Rail carloads have stabilized in the lower mid-single-digit range year-over-year, well off the trough of about -25% year-over-year as seen early on in the pandemic.

Outside of coal carloads, which are in inexorable secular decline as the U.S. pursues a cleaner energy future, and petroleum carloads, which are also still in deep decline, most carload segments (chemicals, automotive, grain and forest products) are experiencing a nice recovery and are not far off from turning positive.

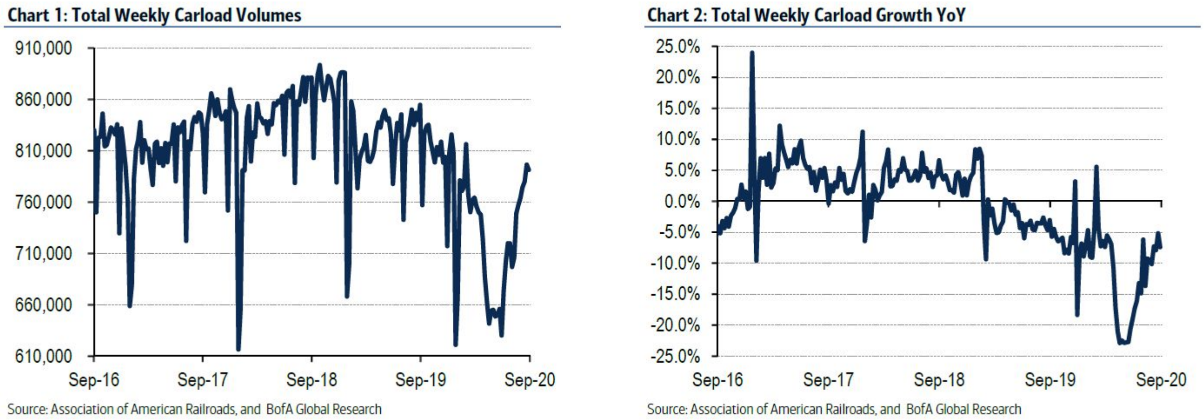
So far, the transportation markets (and particularly truckload) have been thriving on outsize demand for consumer goods, which according to FreightWaves' estimates accounts for about 40% of total truckload volumes. There has been a marked increase in demand for consumer goods (first for essentials like groceries and CPG but now extending to most discretionary categories) and a decrease in spending on services like travel and entertainment. But a recovery in the industrial freight industry could signal a more broad-based recovery and suggest more sustainability to the strength of the current transportation markets in the U.S.

Figure 9: Rail, chemical and motor vehicle carloads suggest an uptick in industrial freight flows



[SONAR: RTOTC.USA, RTOCH.USA, RTOMV.USA]

Figure 10: Total weekly carload volumes and weekly carload growth y/y



Source: Association of American Railroads (AAR), BofA Global Research

An automotive recovery should aid industrial freight flows

Motor vehicle production nearly came to a standstill in April, as most automotive plants were shut down due to the initial outbreak of COVID-19. As a result, the yearly change in motor vehicle and parts production (SONAR: IPROG.MOTR) bottomed out in April as production was down 82.3% year-over-year. Since April, motor vehicle and parts production has recovered to be down just 1.4% year-over-year.

Sales of motor vehicles in the U.S. have improved dramatically as well. At the height of the COVID-19 induced shutdown in March, the seasonally adjusted annual rate (SAAR) of monthly new vehicle sales in the U.S. crashed all the way down to 6.5 million. The latest SAAR reading from August was 15.2 million, which is a remarkable recovery and is now down only 14% year-over-year. In addition, inventories — particularly in the high margin, high average selling price pickup trucks — are running significantly low compared to 5-year average levels which should drive more auto parts, production and overall activity throughout the automotive supply chain as vehicles are sold at retail.

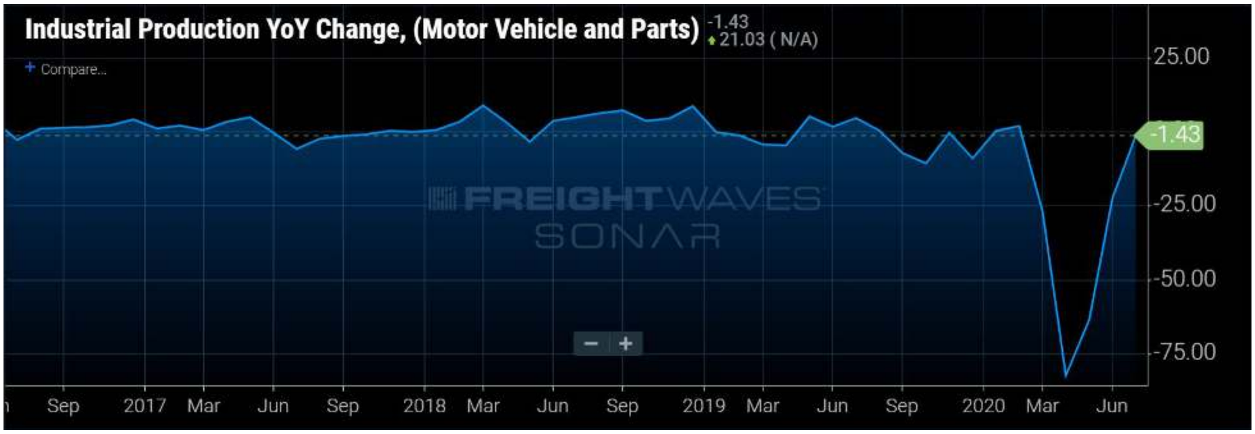
Shippers, carriers and brokers with meaningful exposure to the automotive industry should have recently seen a drastic improvement in fundamentals and the pace of business.

Ultimately, the automotive industry has recovered in a meaningful way after being nonexistent in April and May. The resurgence in automotive production will be a potential tailwind for the U.S. Class I railroads.

The primary, persistent near- to medium-term risk to automotive-related industrial freight volumes is the fact that many Americans will continue to work from home for the foreseeable future, which should place downward pressure on miles driven and the need to purchase new (or used) vehicles for commuting. However, the downturn in both domestic and international air travel may offset this drag to some degree as Americans opt to drive closer to home for vacations (should they take one).

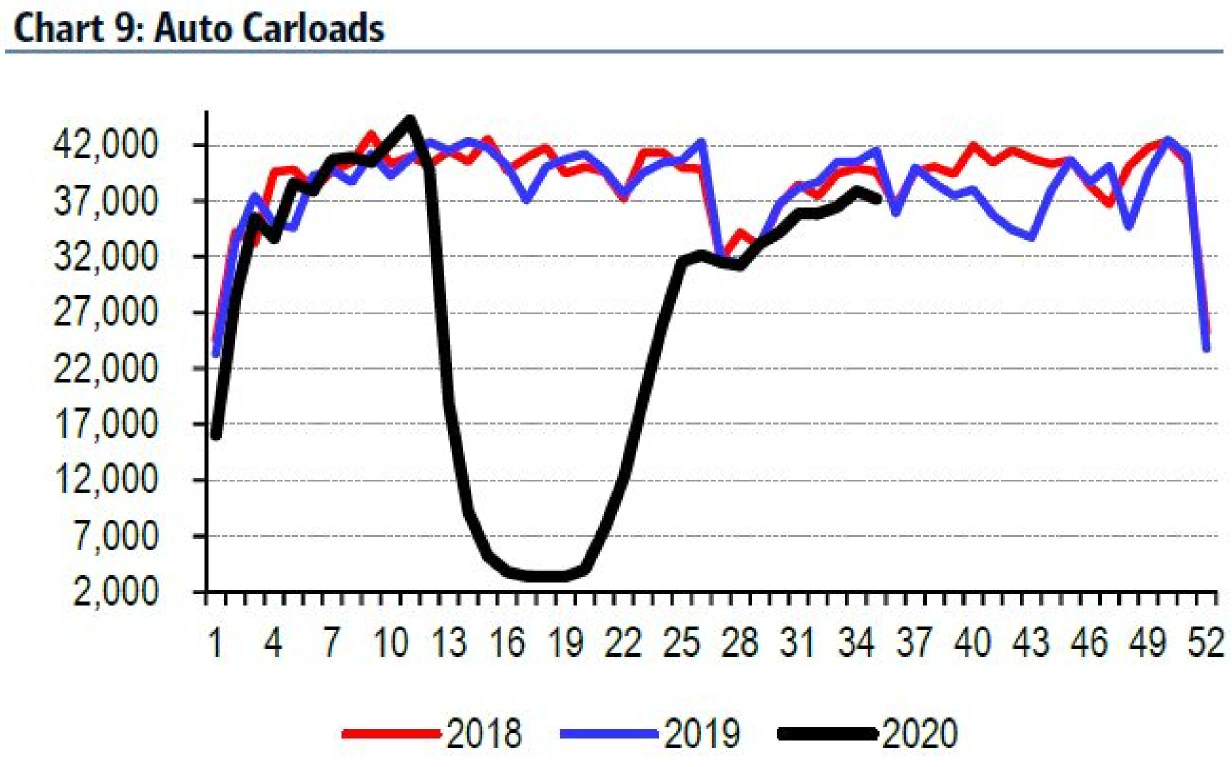
Lastly, electric vehicles (EVs) represent a long-term threat to automotive freight volumes given EV powertrains are said to only have about 20 parts compared to about 2,000 for vehicles with an internal combustion engine (ICE).

Figure 11: Motor vehicle and parts industrial production y/y



[SONAR: IPROG.MOTR]

Figure 12: Automotive carloads experiencing a V-shaped recovery in 2020



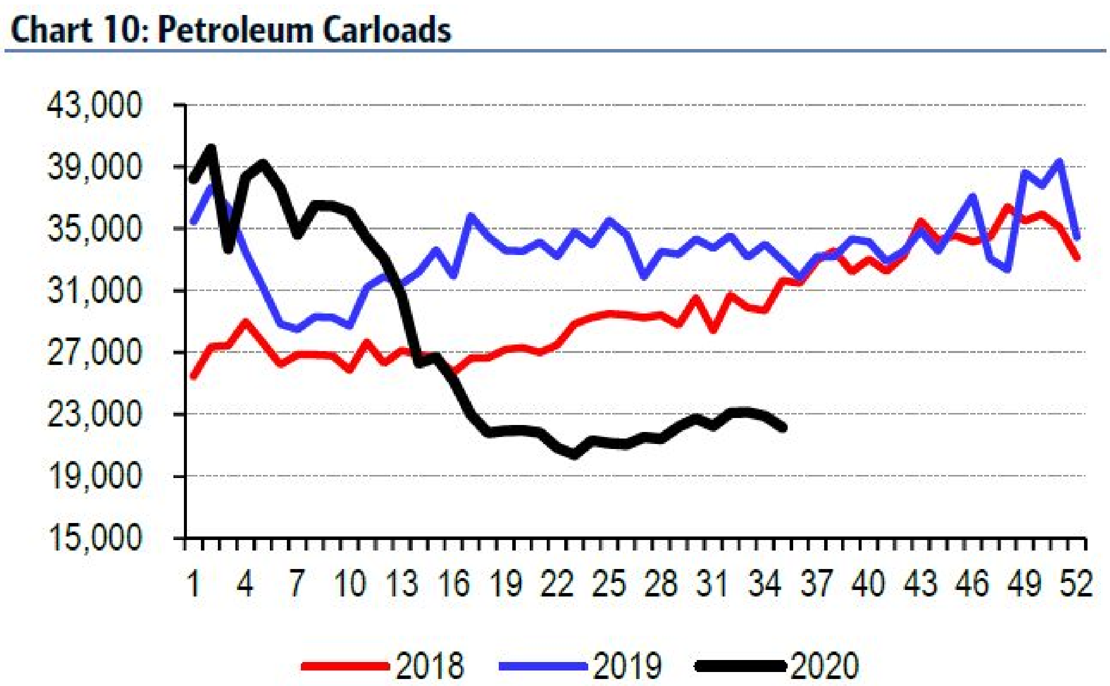
Source: Association of American Railroads (AAR), BofA Global Research

Oil- and gas-related industrial freight remains depressed

If one extends industrial freight to the energy sector, specifically oil- and gas-related freight, then demand in this segment has been extraordinarily weak but on the bright side, it has also likely bottomed out. The latter conclusion can be measured by the bottoming out and slight rebound in the Baker Hughes Rig Count and the U.S. Frac Spread Count (two closely watched indicators of future oil production).

Oil production affects demand for railroad and trucking transportation, the price of petrochemicals and plastics, as well as many other industrial products.

Figure 13: Petroleum rail carloads are still extremely depressed



Source: Association of American Railroads (AAR), BofA Global Research

Flatbed, open-deck and specialized truckload carriers are a proxy for industrial demand

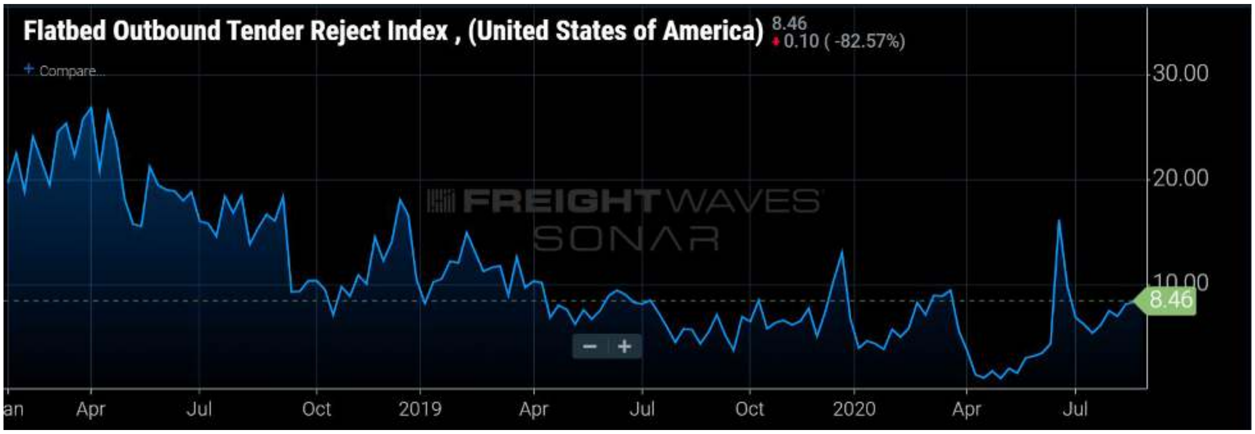
Industrial equipment and machinery as well as inputs like steel often do not fit into standard dry van trailers and must be shipped on flatbed, open-deck or specialized trailers. Additionally, there are generally far greater regulations associated with moving industrial freight given the greater size of the freight and additional dangers associated with moving it.

Year-to-date, the industrial economy in the U.S. has lagged that of the consumer economy, which is evident when looking at the performance of flatbed carriers compared to dry van or reefer carriers. For example, flatbed tender rejections (SONAR: FOTRI.USA) are still hovering only around 8%. On the positive side, flatbed rejections are nearly 300 bps higher than 2019 levels and well off the bottom in April 2020 of under 1%. However, the 8% flatbed tender rejections, a proxy for the demand of industrial-related freight, compares to reefer tender rejections of 38% and dry van tender rejections of 28%. Flatbed rejections are signaling a nascent recovery but to a much lesser extent than other truckload trailer types.

Figure 14: Flatbed Outbound Tender Reject Index - OTRI (Blue), Dry van OTRI (Purple), Reefer OTRI (Green)

[SONAR: FOTRI.USA, VOTRI.USA, ROTRI.USA]

Figure 15: Flatbed Outbound Tender Reject Index



[SONAR: FOTRI.USA]

It is important to look at more than just full flatbed truckload as a great deal of industrial freight moves by many other modes of transportation, including rail, truck, ship, barge and LTL if palletized. These modes can be involved in the transportation process from raw materials to finished output.

For example, if we think about the transportation of construction materials, machinery and equipment to and from a job site when building a multifamily apartment complex, much of this freight will be oversized, and moving it is extremely costly and complicated. All of the inputs have likely been transported in multiple modes of transportation before arriving at the job site.

As far as a pure-play benchmark for the recovery of industrial transportation demand, one can look at Daseke Inc., the largest publicly traded flatbed, open-deck and specialized trucking carrier. While the stock lost about 75% of its value early on in the pandemic (falling from $4 to $1), it has since risen more than sixfold to above $6 in the past several months. Given Daseke is fully exposed to the health of the U.S. industrial economy, this is potentially one more clear sign that a recovery is underway. Lastly, the largest, most liquid industrials exchange-traded fund (ETF), the Industrial Select Sector SPDR Fund (XLI), is signaling that a strong fundamental recovery for a broad basket of large U.S. industrial companies is on the horizon.

Figure 16: Daseke (DSKE) - Three-year stock chart

Source: Stockcharts.com

Figure 17: Industrial Select Sector SPDR Fund (XLI) - Three-year stock chart

Source: Stockcharts.com

Government, aerospace and defense industrial freight is currently a mixed bag

The government/military and aerospace segments of industrial freight are a “tale of two cities” currently.

The demand for government and military freight is generally inelastic and grows each year, even in a pandemic or deep recession, so long as the U.S. defense budget is trending upward. This is the case now with demand for military-related freight said to be robust and running near an all-time high.

The U.S. aerospace industry, on the other hand, has been characterized by industry experts as in the midst of a depression with no real visibility as far as the potential for a meaningful recovery. Both passenger traffic and the revenue and profit streams of major global airlines have been decimated by COVID-19, leading airlines to cancel or delay orders for aircraft, which ripples down through the entire aerospace industrial supply chain.

Conclusion

Industrial freight varies immensely and is very diverse. While there are still a few pockets of severe weakness (such as the demand for energy and coal), overall industrial freight is staging a significant rebound and seeing a demand surge as the U.S. begins to recover and the industrial economy improves at a lag to the consumer economy. Particularly robust pockets of strength include housing-related freight, lumber and automotive.

Moreover, this nascent recovery in industrial freight is coming at a time of already severely constrained capacity in the trucking industry following 18 months of falling capacity. Rising carrier bankruptcies, sky-high insurance inflation, massively depressed new truck orders, newly implemented Drug and Alcohol Clearinghouse regulations and constrained capacity (and low utilization) at driving schools for large enterprise carriers are all taking a toll.

Meanwhile, dry van and reefer load volumes continue to rise and notch all-time highs, most recently tracking up double digits year-over-year. Should the recovery in industrial freight continue, the likelihood of a sustained tight transportation market heading into 2021 increases materially.

List of Figures

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